

# PATENT ABSTRACTS OF JAPAN

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## (54) MANUFACTURE OF SEMICONDUCTOR DEVICE

### (57)Abstract:

PURPOSE: To enable a viahole through-hole and an element isolating groove to be formed at a time without leaving resist unremoved inside the viahole through hole by a method wherein a support substrate is pasted on the surface of semiconductor devices through the intermediary of wax, a metal film is exposed inside the through-hole, and a plating process is carried out.

CONSTITUTION: A support substrate 100 is pasted on the surface of semiconductor devices formed on a semiconductor substrate 10 through the intermediary of wax 200, and a through-hole which electrically connects the front and rear of the semiconductor device together and an isolating groove which isolates the semiconductor devices separately from each other are provided to the rear of the semiconductor device at a time. Then, the wax 200 or the support substrate 100 is removed by etching as deep as prescribed through the isolating groove, and a metal film 40 is deposited on all the rear of the semiconductor device to electrically connect the front and rear of the semiconductor device together through the through-hole. Next, a resist film 30 is applied onto all the rear of the metal film 40 and subjected to an etching operation to make the metal film 40 exposed inside a through-hole 10b, and a plating process 60 is carried out.

